



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/577,697

03/15/2007

Lei Yang

57640/D587

3714

23363 7590 01/12/2009
CHRISTIE, PARKER & HALE, LLP
PO BOX 7068
PASADENA, CA 91109-7068

EXAMINER

AMBAYE, MEWALE A

ART UNIT

PAPER NUMBER

4124

MAIL DATE

DELIVERY MODE

01/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/577,697	Applicant(s) YANG, LEI	
	Examiner MEWALE AMBAYE	Art Unit 4124	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/28/2006,06/13/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claim 1-9 are pending and have been executed.

Oath/Declaration

2. The oath/Declaration filed on 04/28/2006 is accepted by the examiner.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent China Application No. 200310103400.7, filed on 10/30/2003.

Information Disclosure Statement

4. The information disclosure statement filed on 04/28/06, 06/13/07 is in compliance with 37 CFR 1.97. Accordingly, the information discloser statement is being considered by the examiner.

Drawings

5. The drawing is objected to: applicant describes figures 1-2 as being a prior art on page 2-3 of the applicant's background (disclosure). Therefore "prior art" labeling is required on figures 1 and 2. Appropriate correction is required

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 4124

7. Claims 1-3 & 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim US Patent No 7386876 B2, in view of Sherer et al (hereinafter referred as Sherer) US Patent No. 6,115,376 B2)

8. As per claim 1: Kim discloses a method for preventing Ethernet from being attacked, comprising: establishing and storing a fixed map (*address table*) between a port and a hardware address of a terminal device (See Col 3 line 48 through Col 4 line 10), then forwarding a data packet according to the fixed map after an Ethernet communication device detects a new connection between the port and the terminal device and receives a data packet from the terminal device (see Col 2 lines 64 through Col 3 line 5).

Kim does not explicitly teach deleting the fixed map after the Ethernet communication device detects a disconnection between the port and the terminal device.

However, Sherer discloses deleting the fixed map after the Ethernet connection between the port and the terminal device and receives a data packet from the terminal device (See Col 6 lines 59-63).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to employ the teaching method of Sherer within Kim method in order to improve network security in a network that includes a star configured interconnection device such as repeaters, bridges, switch or router, that has a plurality of ports adapted for connection to respective MAC layer devices (See Sherer Col 2 Lines 54-58).

9. As per claim 2: the combination of Kim and Sherer discloses the method further comprising: after receiving the data packet from the terminal device, judging whether the fixed map has been established (See Kim claim 2 limitation lines 3-11 and Col 4 lines 4-12); if so, directly forwarding the data packet; otherwise, establishing and storing the fixed map between the port and the hardware address of the terminal device (See Kim claim limitation lines 13-17 and Col 4 lines 4-12); otherwise, establishing and storing the fixed map between the port and the hardware address of the terminal device (See Kim Col 4 lines 4-12).

10. As per claim 3: the combination of Kim and Sherer discloses the method wherein the step of directly forwarding the data packet comprises the step of judging whether the hardware address carried in the data packet is consistent with the hardware address corresponding to the port in said fixed map (See Kim Col 2 line 64 through Col 3 line 5); if so, forwarding the data packet according to a conventional forwarding processing (see Kim Col 2 line 64 through Col 3 line 5); otherwise, discarding the data packet (See Kim Col 2 line 64 through Col 3 line 5).

11. As per claim 5: the combination of Kim and Sherer discloses the method wherein said hardware address is a Media Access Control (MAC) address (see Kim Col 2 lines 63-68).

12. As per claim 6: the combination of Kim and Sherer discloses the method wherein detecting the new connection or the disconnection between the terminal device and the port is implemented by detecting physical signals in the port (see Sherer Col 6 lines 59-63).

13. As per claim 7: the combination of Kim and Sherer discloses the method wherein said

Art Unit: 4124

Ethernet communication device is a two-layer switch, a three-layer switch, a firewall device or an Ethernet bridge (See Kim Col 1 lines 57-64).

14. As per claim 8: the combination of Kim and Sherer discloses the method wherein said terminal device is a personal computer, a server or an IP telephone set (See Kim Col 3 lines 36-42)

15. As per claim 9: the combination of Kim and Sherer discloses the method wherein said fixed map is stored in a hardware address table of the Ethernet communication device (See Kim Col 4 lines 4-12 and claim 1).

16. Claim 4 is rejected under U.S.C. 103(a) as being unpatentable over Km (US Patent No. 7,386,876) in view of Sherer et al (hereinafter referred as Sherer) US Patent No. 6,115,376 and further in view of Yao et al (hereinafter referred as Yao) US Patent No. 7,263,559.

17. As per claim 4: the combination of Kim and Sherer disclose claim 3 as recited above. The combination of Kim and Sherer do not explicitly teach a method further comprising: after discarding the data packet, recording the judgment result in a log and informing a network administrator.

However, Yao discloses a method further comprising after discarding the data packet, recording the judgment result in a log and informing a network administrator (See Col 2 lines 43-51)

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to employ the teaching method of Yao within Kim and Sherer method in order to provide a method for preventing IP address cheating in dynamic address allocation (See Col 2 lines 1-3).

Conclusion

18. The prior art made of record and not relied upon considered pertinent to applicant's discloser. See PTO 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mewale Ambaye whose telephone number is (571) 270-7634. The examiner can normally be reached on M - F, 8:00 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reach on (571) 272-3155. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from their Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)?

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (In USA or Canada) or 571-272-1000.

/Brian T. Pendleton/

Supervisory Patent Examiner, Art Unit 2425